



## SEQUENCE LISTING

#7

<110> GARABEDIAN, Michael  
TANEJA, Samir  
HITTELMAN, Adam  
MARKUS, Steven

<120> METHOD FOR SCREENING TRANSCRIPTIONAL COREGULATORY PROTEINS OF TRANSCRIPTION FACTORS, AND ANDROGEN RECEPTOR TRANSCRIPTIONAL COREGULATORY PROTEINS AS TARGETS FOR ANDROGEN RECEPTOR-DEPENDENT DISEASES

<130> GARABEDIAN=1.1A

<140> 09/816,669

<141> 2001-03-26

<150> 60/225,618

<151> 2000-08-15

<150> 60/191,768

<151> 2000-03-24

<160> 20

<170> PatentIn version 3.1

<210> 1

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Tyr Leu Gln Leu Arg Asn Val Ile Glu Arg Leu Gln Glu Ala Lys His  
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Ser Glu Leu Tyr Met Gln Val Asp Leu Gly Cys Asn Phe Phe Val Asp  
65 70 75 80

Thr Val Val Pro Asp Thr Ser Arg Ile Tyr Val Ala Leu Gly Tyr Gly  
85 90 95

Phe Phe Leu Glu Leu Thr Leu Ala Glu Ala Leu Lys Phe Ile Asp Arg  
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Lys Ser Ser Leu Leu Thr Glu Leu Ser Asn Ser Leu Thr Lys Asp Ser  
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Ala Gly His Asp Ala Pro Arg Arg Thr Arg Pro Ser Ala Arg Lys Pro
          35                      40                      45

Leu Ser Cys Phe Ser Arg Arg Pro Met Pro Thr Arg Glu Pro Pro Lys
          50                      55                      60

Thr Arg Gly Ser Arg Gly His Leu His Thr His Pro Pro Gly Pro Gly
65                      70                      75                      80

Pro Pro Leu Gln Gly Leu Ala Pro Arg Gly Leu Lys Thr Ser Ala Pro
                85                      90                      95

Arg Pro Pro Cys Gln Pro Gln Pro Gly Pro His Lys Ala Lys Thr Lys
          100                      105                      110

Lys Ile Val Phe Glu Asp Glu Leu Leu Ser Gln Ala Leu Leu Gly Ala
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Lys Lys Pro Ile Gly Ala Ile Pro Lys Gly His Lys Pro Arg Pro His
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Pro Val Pro Asp Tyr Glu Leu Lys Tyr Pro Pro Val Ser Ser Glu Arg
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Glu Arg Ser Arg Tyr Val Ala Val Phe Gln Asp Gln Tyr Gly Glu Phe

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Ala Gln Val Ala Ala Arg Val Trp Arg Glu Phe Glu Met Lys Arg Met		
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Asp Pro Gly Phe Leu Asp Lys Gln Ala Arg Cys His Tyr Leu Lys Gly		
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Lys Leu Arg His Leu Lys Thr Gln Ile Gln Lys Phe Asp Asp Gln Gly		
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 35 40 45

Val Ala Glu Leu Gln Ser Arg Leu Ala Ala Leu Gly Arg Gln Val Gly  
 50 55 60

Ala Arg Val Leu Asp Ala Leu Val Ala Arg Glu Lys Gly Ala Arg Arg  
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Glu Thr Lys Val Leu Gly Ala Leu Leu Phe Val Lys Gly Ala Val Trp  
 85 90 95

Lys Ala Leu Phe Gly Lys Glu Ala Asp Lys Leu Glu Gln Ala Asn Asp  
 100 105 110

Asp Ala Arg Thr Phe Tyr Ile Ile Glu Arg Glu Pro Leu Ile Asn Thr  
 115 120 125

Tyr Ile Ser Val Pro Lys Glu Asn Ser Thr Leu Asn Cys Ala Ser Phe  
 130 135 140

Thr Ala Gly Ile Val Glu Ala Val Leu Thr His Ser Gly Phe Pro Ala  
 145 150 155 160

Lys Val Thr Ala His Trp His Lys Gly Thr Thr Leu Met Ile Lys Phe  
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Glu Glu Ala Val Ile Ala Arg Asp Arg Leu Glu Gly Arg  
 180 185

&lt;210&gt; 7

&lt;211&gt; 126

&lt;212&gt; DNA

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Arg Ser Thr Asp His Ser Ile Ser Pro Ser Ile Asp Pro His Leu Gln  
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Ile Ser His Gln Gln Pro Thr Asn His His Pro Thr Met Thr Asn Gln  
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Gly Arg Ala Phe Ser Asp Arg Ser Ser Leu Thr Phe His Gln Ala Ile
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His Thr Gly Glu Lys Pro Tyr Lys Cys His Glu Cys Gly Lys Val Phe
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Arg His Asn Ser Tyr Leu Ala Thr His Arg Arg Ile His Thr Gly Glu
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Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Met His Ser
85             90             95

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Asn Leu Thr Thr His Lys Val Ile His Thr Gly Glu Lys Pro Tyr Lys
100            105            110

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Cys Asn Gln Cys Gly Lys Val Phe Thr Gln Asn Ser His Leu Ala Asn  
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His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Asn Glu Cys  
 130 135 140

Gly Lys Ala Phe Ser Val Arg Ser Ser Leu Thr Thr His Gln Ala Ile  
 145 150 155 160

His Thr Gly Lys Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe  
 165 170 175

Thr Gln Asn Ala His Leu Ala Asn His Arg Arg Ile His Thr Gly Glu  
 180 185 190

Lys Pro Tyr Arg Cys Thr Glu Cys Gly Lys Ala Phe Arg Val Arg Ser  
 195 200 205

Ser Leu Thr Thr His Met Ala Ile His Thr Gly Glu Lys Arg Tyr Lys  
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Gly Glu Ser Phe Ile Gln Thr Asn Asp Pro Ser Leu Lys Leu Phe Gln
          20          25          30

```

```

Cys Ala Val Cys Asn Lys Phe Thr Thr Asp Asn Leu Asp Met Leu Gly
          35          40          45

```

```

Leu His Met Asn Val Glu Arg Ser Leu Ser Glu Asp Glu Trp Lys Ala
50          55          60

```

```

Val Met Gly Asp Ser Tyr Gln Cys Lys Leu Cys Arg Tyr Asn Thr Gln
65          70          75          80

```

```

Leu Lys Ala Asn Phe Gln Leu His Cys Lys Thr Asp Lys His Val Gln
          85          90          95

```

```

Lys Tyr Gln Leu Val Ala His Ile Lys Glu Gly Gly Lys Ala Asn Glu
100          105          110

```

```

Trp Arg Leu Lys Cys Val Ala Ile Gly Asn Pro Val His Leu Lys Cys
115          120          125

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```

Asn Ala Cys Asp Tyr Tyr Thr Asn Ser Leu Glu Lys Leu Arg Leu His
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Thr Val Asn Ser Arg His Glu Ala Ser Leu Lys Leu Tyr Lys His Leu
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Val Leu Cys Asn Tyr Ser Thr Lys Ala Lys Leu Asn Leu Ile Gln His  
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Val Arg Ser Met Lys His Gln Arg Ser Glu Ser Leu Arg Lys Leu Gln  
 195 200 205

Arg Leu Gln Lys Gly Leu Pro Glu Glu Asp Glu Asp Leu Gly Gln Ile  
 210 215 220

Phe Thr Ile Arg Arg Cys Pro Ser Thr Asp Pro Glu Glu Ala Ile Glu  
 225 230 235 240

Asp Val Glu Gly Pro Ser Glu Thr Ala Ala Asp Pro Glu Glu Leu Ala  
 245 250 255

Lys Asp Gln Glu Gly Gly Ala Ser Ser Ser Gln Ala Glu Lys Glu Leu  
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Thr Asp Ser Pro Ala Thr Ser Lys Arg Ile Ser Phe Pro Gly Ser Ser  
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Glu Ser Pro Leu Ser Ser Lys Arg Pro Lys Thr Ala Glu Glu Ile Lys  
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Pro Glu Gln Met Tyr Gln Cys Pro Tyr Cys Lys Tyr Ser Asn Ala Asp  
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Val Asn Arg Leu Arg Val His Ala Met Thr Gln His Ser Val Gln Pro  
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Met Leu Arg Cys Pro Leu Cys Gln Asp Met Leu Asn Asn Lys Ile His  
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Leu Gln Leu His Leu Thr His Leu His Ser Val Ala Pro Asp Cys Val  
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Glu Lys Leu Ile Met Thr Val Thr Thr Pro Glu Met Val Met Pro Ser  
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Ser Met Phe Leu Pro Ala Ala Val Pro Asp Arg Asp Gly Asn Ser Asn  
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Leu Glu Glu Ala Gly Lys Gln Pro Glu Thr Ser Glu Asp Leu Gly Lys

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Lys	Thr	Ile	Glu	Lys	Leu	Gln	Leu	His	Ser	Gln	Tyr	His	Val	Ile	Arg				
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Ala	Ala	Thr	Met	Cys	Cys	Leu	Cys	Gln	Arg	Ser	Phe	Arg	Thr	Phe	Gln				
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Asp	Ile	Gln	Gln	Leu	Tyr	Gly	Gly	Leu	Leu	Ala	Asn	Gly	Asp	Leu	Leu				
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Glu	Asp	Lys	Glu	Glu	Glu	Ser	Asp	Leu	Glu	Asp	Lys	Gln	Ser	Pro	Thr				
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Gly	Ser	Asp	Ser	Gly	Ser	Val	Gln	Glu	Asp	Ser	Gly	Ser	Glu	Pro	Lys				
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Leu	Asp	Pro	Ser	Arg	Pro	Tyr	Lys	Cys	Thr	Val	Cys	Lys	Glu	Ser	Phe				
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				645					650					655					



His Lys Leu Lys Arg Ala Leu Gln Glu Ser Ala Thr Gly Gln Pro Glu  
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 Pro Thr Ser Ser Pro Asp Asn Lys Pro Phe Lys Cys Asn Thr Cys Asn  
 675 680 685  
 Val Ala Tyr Ser Gln Ser Ser Thr Leu Glu Ile His Met Arg Ser Val  
 690 695 700  
 Leu His Gln Thr Lys Ala Arg Ala Ala Lys Leu Glu Ala Ala Ser Gly  
 705 710 715 720  
 Ser Ser Asn Gly Thr Gly Asn Ser Ser Ser Ile Ser Leu Ser Ser Ser  
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 Thr Pro Ser Pro Val Ser Thr Ser Gly Ser Asn Thr Phe Thr Thr Ser  
 740 745 750  
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 Val Pro Thr Glu Ser Val Gly Met Pro Pro Leu Gly Asn Pro Ile Gly  
 770 775 780  
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 785 790 795 800  
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Glu Ile Leu Thr Pro Thr	Ser Ser Ser Cys Ser Thr	Pro Met Pro		
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Pro Leu Pro Gln Ser Ser	Pro Ser Pro Ser Gln Leu	Ser His Leu		
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1910						1915					1920			
Val	Asn	Thr	Ala	Ile	Thr	Asp	Thr	Thr	Thr	Gly	Asp	Glu	Gly	Asn
1925						1930					1935			
Ala	Asp	Asn	Asp	Ser	Ala	Thr	Gly	Ile	Ala	Thr	Glu	Thr	Lys	Ser
1940						1945					1950			
Ser	Ser	Ala	Pro	Asn	Glu	Gly	Leu	Thr	Lys	Ala	Ala	Met	Met	Ala
1955						1960					1965			
Met	Ser	Glu	Tyr	Glu	Asp	Arg	Leu	Ser	Ser	Gly	Leu	Val	Ser	Pro
1970						1975					1980			
Ala	Pro	Ser	Phe	Tyr	Ser	Lys	Glu	Tyr	Asp	Asn	Glu	Gly	Thr	Val
1985						1990					1995			
Asp	Tyr	Ser	Glu	Thr	Ser	Ser	Leu	Ala	Asp	Pro	Cys	Ser	Pro	Ser
2000						2005					2010			
Pro	Gly	Ala	Ser	Gly	Ser	Ala	Gly	Lys	Ser	Gly	Asp	Ser	Gly	Asp
2015						2020					2025			
Arg	Pro	Gly	Gln	Lys	Arg	Phe	Arg	Thr	Gln	Met	Thr	Asn	Leu	Gln
2030						2035					2040			
Leu	Lys	Val	Leu	Lys	Ser	Cys	Phe	Asn	Asp	Tyr	Arg	Thr	Pro	Thr
2045						2050					2055			
Met	Leu	Glu	Cys	Glu	Val	Leu	Gly	Asn	Asp	Ile	Gly	Leu	Pro	Lys
2060						2065					2070			
Arg	Val	Val	Gln	Val	Trp	Phe	Gln	Asn	Ala	Arg	Ala	Lys	Glu	Lys
2075						2080					2085			
Lys	Ser	Lys	Leu	Ser	Met	Ala	Lys	His	Phe	Gly	Ile	Asn	Gln	Thr
2090						2095					2100			

Ser	Tyr	Glu	Gly	Pro	Lys	Thr	Glu	Cys	Thr	Leu	Cys	Gly	Ile	Lys
2105						2110					2115			
Tyr	Ser	Ala	Arg	Leu	Ser	Val	Arg	Asp	His	Ile	Phe	Ser	Gln	Gln
2120						2125					2130			
His	Ile	Ser	Lys	Val	Lys	Asp	Thr	Ile	Gly	Ser	Gln	Leu	Asp	Lys
2135						2140					2145			
Glu	Lys	Glu	Tyr	Phe	Asp	Pro	Ala	Thr	Val	Arg	Gln	Leu	Met	Ala
2150						2155					2160			
Gln	Gln	Glu	Leu	Asp	Arg	Ile	Lys	Lys	Ala	Asn	Glu	Val	Leu	Gly
2165						2170					2175			
Leu	Ala	Ala	Gln	Gln	Gln	Gly	Met	Phe	Asp	Asn	Thr	Pro	Leu	Gln
2180						2185					2190			
Ala	Leu	Asn	Leu	Pro	Thr	Ala	Tyr	Pro	Ala	Leu	Gln	Gly	Ile	Pro
2195						2200					2205			
Pro	Val	Leu	Leu	Pro	Gly	Leu	Asn	Ser	Pro	Ser	Leu	Pro	Gly	Phe
2210						2215					2220			
Thr	Pro	Ser	Asn	Thr	Ala	Leu	Thr	Ser	Pro	Lys	Pro	Asn	Leu	Met
2225						2230					2235			
Gly	Leu	Pro	Ser	Thr	Thr	Val	Pro	Ser	Pro	Gly	Leu	Pro	Thr	Ser
2240						2245					2250			
Gly	Leu	Pro	Asn	Lys	Pro	Ser	Ser	Ala	Ser	Leu	Ser	Ser	Pro	Thr
2255						2260					2265			
Pro	Ala	Gln	Ala	Thr	Met	Ala	Met	Gly	Pro	Gln	Gln	Pro	Pro	Gln
2270						2275					2280			
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Gln	Val	Gln	Gln	Pro	Pro	Pro
2285						2290					2295			
Pro	Pro	Ala	Ala	Gln	Pro	Pro	Pro	Thr	Pro	Gln	Leu	Pro	Leu	Gln
2300						2305					2310			
Gln	Gln	Gln	Gln	Arg	Lys	Asp	Lys	Asp	Ser	Glu	Lys	Val	Lys	Glu
2315						2320					2325			
Lys	Glu	Lys	Ala	His	Lys	Gly	Lys	Gly	Glu	Pro	Leu	Pro	Val	Pro

2330		2335		2340
Lys Lys Glu Lys Gly Glu Ala Pro Thr Ala Thr Ala Ala Thr Ile	2345	2350	2355	
Ser Ala Pro Leu Pro Thr Met Glu Tyr Ala Val Asp Pro Ala Gln	2360	2365	2370	
Leu Gln Ala Leu Gln Ala Ala Leu Thr Ser Asp Pro Thr Ala Leu	2375	2380	2385	
Leu Thr Ser Gln Phe Leu Pro Tyr Phe Val Pro Gly Phe Ser Pro	2390	2395	2400	
Tyr Tyr Ala Pro Gln Ile Pro Gly Ala Leu Gln Ser Gly Tyr Leu	2405	2410	2415	
Gln Pro Met Tyr Gly Met Glu Gly Leu Phe Pro Tyr Ser Pro Ala	2420	2425	2430	
Leu Ser Gln Ala Leu Met Gly Leu Ser Pro Gly Ser Leu Leu Gln	2435	2440	2445	
Gln Tyr Gln Gln Tyr Gln Gln Ser Leu Gln Glu Ala Ile Gln Gln	2450	2455	2460	
Gln Gln Gln Gln Lys Val Gln Gln Gln Gln Pro Lys Ala Ser Gln	2465	2470	2475	
Thr Pro Val Pro Pro Gly Ala Pro Ser Pro Asp Lys Asp Pro Ala	2480	2485	2490	
Lys Glu Ser Pro Lys Pro Glu Glu Gln Lys Asn Thr Pro Arg Glu	2495	2500	2505	
Val Ser Pro Leu Leu Pro Lys Leu Pro Glu Glu Pro Glu Ala Glu	2510	2515	2520	
Ser Lys Ser Ala Asp Ser Leu Tyr Asp Pro Phe Ile Val Pro Lys	2525	2530	2535	
Val Gln Tyr Lys Leu Val Cys Arg Lys Cys Gln Ala Gly Phe Ser	2540	2545	2550	
Asp Glu Glu Ala Ala Arg Ser His Leu Lys Ser Leu Cys Phe Phe	2555	2560	2565	



Gly Gln Ser Val Val Asn Leu Gln Glu Met Val Leu His Val Pro  
 2570 2575 2580  
 Thr Gly Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly  
 2585 2590 2595  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Ser Tyr His Cys Leu Ala  
 2600 2605 2610  
 Cys Glu Ser Ala Leu Cys Gly Glu Glu Ala Leu Ser Gln His Leu  
 2615 2620 2625  
 Glu Ser Ala Leu His Lys His Arg Thr Ile Thr Arg Ala Ala Arg  
 2630 2635 2640  
 Asn Ala Lys Glu His Pro Ser Leu Leu Pro His Ser Ala Cys Phe  
 2645 2650 2655  
 Pro Asp Pro Ser Thr Ala Ser Thr Ser Gln Ser Ala Ala His Ser  
 2660 2665 2670  
 Asn Asp Ser Pro Pro Pro Pro Ser Ala Ala Ala Pro Ser Ser Ala  
 2675 2680 2685  
 Ser Pro His Ala Ser Arg Lys Ser Trp Pro Gln Val Val Ser Arg  
 2690 2695 2700  
 Ala Ser Ala Ala Lys Pro Pro Ser Phe Pro Pro Leu Ser Ser Ser  
 2705 2710 2715  
 Ser Thr Val Thr Ser Ser Ser Cys Ser Thr Ser Gly Val Gln Pro  
 2720 2725 2730  
 Ser Met Pro Thr Asp Asp Tyr Ser Glu Glu Ser Asp Thr Asp Leu  
 2735 2740 2745  
 Ser Gln Lys Ser Asp Gly Pro Ala Ser Pro Val Glu Gly Pro Lys  
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18